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ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
     2004:632132 CAPLUS
ΑN
DN
     141:160851
     Entered STN: 06 Aug 2004
ED
     Agents for simultaneous degreasing-and-chemical conversion and metals
TI
     treated by the agents
     Matsukawa, Masahiko; Chihara, Hiroshi; Makino, Kazuhiro
IN
PA
     Nippon Paint Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 15 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
IC
     ICM C23C022-34
     ICS C23G001-02; C25D013-02
     56-6 (Nonferrous Metals and Alloys)
     Section cross-reference(s): 46
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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     JP 2004218071
                         A2
                                20040805
                                            JP 2003-403689
                                                                    20031202 <--
PRAI JP 2002-372771
                         Α
                                20021224
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 JP 2004218071
                 ICM
                        C23C022-34
                 ICS
                        C23G001-02; C25D013-02
 JP 2004218071
                 FTERM 4K026/AA02; 4K026/AA07; 4K026/AA09; 4K026/AA11;
                        4K026/AA22; 4K026/BA01; 4K026/BA02; 4K026/BB07;
                        4K026/BB08; 4K026/BB10; 4K026/CA13; 4K026/CA18;
                        4K026/CA27; 4K026/CA28; 4K026/CA35; 4K026/CA37;
                        4K026/CA38; 4K026/DA02; 4K026/DA03; 4K026/DA06;
                        4K053/PA02; 4K053/PA08; 4K053/PA10; 4K053/PA13;
                        4K053/QA04; 4K053/RA14; 4K053/RA15; 4K053/RA16;
                        4K053/RA17; 4K053/RA25; 4K053/RA26; 4K053/RA27;
                        4K053/RA29; 4K053/RA46; 4K053/RA47; 4K053/RA64;
                        4K053/YA03
     The agents contain at least Zr, Ti or/and Hf, F and nonionic surfactants
AB∿
     which have HLB value of 9-17 at a content of 20-300,000 ppm. Metal
     surfaces treated by the agents have good bonding to coating and resistance
     metal surface treatment chem conversion agent nonionic surfactant;
ST
     zirconium titanium hafnium metal surface degreasing chem conversion
IΤ
     Bromates
     Chlorites
     Fluorides, uses
     Nitro compounds
     Perchlórates
     Peroxides, uses
     RL: CAT (Catalyst use); USES (Uses)
        (accelerator; agents containing nonionic surfactants for
        degreasing-and-chemical conversion and metals treated by the agents)
ΙT
     Degreasing
     Surface treatment
        (agents containing nonionic surfactants for degreasing-and-chemical
conversion
        and metals treated by the agents)
     Metals, miscellaneous
     RL: MSC (Miscellaneous)
        (agents containing nonionic surfactants for degreasing-and-chemical
conversion
        and metals treated by the agents)
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Polyoxyalkylenes, uses IT RL: TEM (Technical or engineered material use); USES (Uses) (agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) Silicates, uses IT RL: TEM (Technical or engineered material use); USES (Uses) (agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) Anodization IT (agents containing nonionic surfactants for simultaneous degreasing-and-chemical conversion and metals treated by the agents) Group VIA element compounds IT RL: CAT (Catalyst use); USES (Uses) (dithionites, accelerator; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) Polyoxyalkylenes, uses IT RL: TEM (Technical or engineered material use); USES (Uses) (ethers; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) IT Alkaline earth metals RL: TEM (Technical or engineered material use); USES (Uses) (ions; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) IT (nonionic; agents containing nonionic surfactants for simultaneous degreasing-and-chemical conversion and metals treated by the agents) IT Galvanized steel RL: MSC (Miscellaneous) (panels; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) IT 50-81-7, Ascorbic acid, uses 77-92-9, Citric acid, uses 87-69-4, Tartaric acid, uses 110-15-6, Succinic acid, uses 141-82-2, Malonic acid, uses 2338-05-8, Iron citrate 10039-54-0, Hydroxylamine sulfate 14265-45-3, Sulfite 14797-65-0, Nitrite ion, uses 14874-70-5 1-6, Persulfate ion 17084-08-1, Hexafluorosilicate RL: CAT (Catalyst use); USES (Uses) (accelerator; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) TT 7631-86-9, Silica, uses 14127-69-6, uses 20074-52-6, Iron(3+), uses 22541-53-3, uses 23713-49-7, Zinc ion, uses 25322-68-3D, Polyethylene glycol, alkyl ethers RL: TEM (Technical or engineered material use); USES (Uses) (agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) IT 7439-95-4, Magnesium, uses 7440-32-6, Titanium, uses Copper, uses 7440-58-6, Hafnium, uses 7440-67-7, Zirconium, uses 7440-70-2, Calcium, uses 7440-74-6, Indium, uses RL: TEM (Technical or engineered material use); USES (Uses) (ion; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) IT 7429-90-5, Aluminum, miscellaneous 39462-15-2, SPCC-SD, miscellaneous RL: MSC (Miscellaneous) (panels; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents) RN 50-81-7 RN 77-92-9 RN 87-69-4 RN 110-15-6 RN141-82-2 RN 2338-05-8

RN 10039-54-0 RN14265-45-3 RN 14797-65-0 RN 14874-70-5 RN 15092-81-6 17084-08-1 RN 7631-86-9 RN RN 14127-69-6 RN20074-52-6 RN 22541-53-3 RN 23713-49-7 RN 25322-68-3D RN 7439-95-4 RN 7440-32-6 RN 7440-50-8 RN 7440-58-6 7440-67-7 RN RN 7440-70-2 RN 7440-74-6 RN 7429-90-5 RN39462-15-2 L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN 2004-548766 [53] AN WPIX . DNC C2004-201464 ΤI Degreasing and formation-treatment agent for surface-treatment metal, contains preset amount of solid content and nonionic surfactant having preset hydrophilic lipophilic balance value. DC M12 PA · (NIPA) NIPPON PAINT CO LTD CYC PΤ JP 2004218071 A 20040805 (200453)\* 15 C23C022-34 JP 2004218071 A JP 2003-403689 20031202 PRAI JP 2002-372771 20021224 IC ICM C23C022-34 ICS C23G001-02; C25D013-02 AB JP2004218071 A UPAB: 20040818 NOVELTY - Degreasing and formation-treatment agent contains zirconium, titanium and/or hafnium, fluorine, and a nonionic surfactant. The nonionic surfactant has hydrophilic lipophilic balance value of 9-17. The degreasing and formation-treatment agent contains solid content of 20 -300 000 ppm. DETAILED DESCRIPTION - The degreasing and formation-treatment agent further contains an adhesion providing agent chosen from metal ion (A) chosen from zinc, manganese and cobalt, an alkaline-earth metal ion (B), III group metal-ion (C), copper-ion (D) and silicon containing compound. An INDEPENDENT CLAIM is included for surface-treatment metal. USE - For surface-treatment metal (claimed). ADVANTAGE - The degreasing and formation-treatment agent favorably performs degreasing and formation-treatment without performing surface control process, and has excellent workability and economical efficiency. The agent provides chemical film with excellent stability and coating-film adhesion. Dwg.0/0 FS CPI FA AB MC CPI: M12-B01 ANSWER 3 OF 3 L4 JAPIO (C) 2005 JPO on STN AN 2004-218071 JAPIO TIDEGREASING AND CHEMICAL CONVERSION COATING AGENT, AND SURFACE-TREATED METAL MATSUKAWA MASAHIKO; CHIHARA YASUSHI; MAKINO KAZUHIRO ΙN

PA NIPPON PAINT CO LTD

PI JP 2004218071 A 20040805 Heisei

AI JP 2003-403689 (JP2003403689 Heisei) 20031202

PRAI JP 2002-372771 20021224

FO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2004

IC ICM C23C022-34

ICS C23G001-02; C25D013-02

AB PROBLEM TO BE SOLVED: To provide a degreasing and chemical conversion coating agent capable of depositing a chemical conversion film of excellent stability and coating adhesivity without requiring any surface adjustment step.

SOLUTION: The degreasing and chemical conversion coating agent consists of at least one kind selected from the group consisting of zirconium, titanium and hafnium, fluorine, and nonionic surfactant. The nonionic surfactant has the HLB value of 9-17, and contains solids of 20-300,000 ppm.

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